To: DIRECTORS, DEPUTY DIRECTORS, AND BUREAU CHIEFS

From: Dianna L. Taylor

Bureau Chief of Personnel Management

Subject: Technical Vacancy

Date: September 29, 2016

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement September 30, 2016 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Friday**, **October 14**, **2016**. Applicants will not be accepted after that time and date.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact Jennifer Sunderland or Denise Hamilton at 217/782-5594.

CE V Physical Tests Engineer

Region 3/District 4/Project Implementation

Highways Project Implementation

Peoria

Attachments 41202

Technical Applications (PM 1080 rev 9/19/16) <u>must be received</u> by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to <u>DOT.CO.BPM.EmploymentApplications@Illinois.gov</u> by **Friday, October 14, 2016**, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.



Position Summary Sheet

An Equal Opportunity Employer

Classification: Civil Engineer V Salary Range: \$6,315 - \$10,210

Position Title: Physical Tests Engineer Union Position: X Yes No

Office/Central Bureau/District/Work Address:

OHPI / Region 3 / District 4 / Bureau of Implementation / 401 Main Street, Peoria, IL

Description Of Duties:

This position is accountable for the supervision of personnel engaged in inspecting, testing and reporting of materials used in the construction and maintenance of state highways, county highways, township roads, and city streets.

Special Qualifications:

Required:

- Current Illinois Professional Engineer License
- · Valid driver's license
- Extensive districtwide travel

Desired:

- Nine years' experience in civil engineering, of which at least five years should be in specific area of construction field engineering; three years of which should have been supervising engineering functions
- Knowledge of the principles and practices of civil engineering
- Ability to resolve conflicts with aggregate producers and suppliers regarding departmental specifications and their enforcement
- Ability to maintain harmonious relationships with departmental and industry staff
- Strong oral and written communication skills

Shift/Remarks:

8:00 am - 4:30 pm / Monday - Friday

*THIS POSITION IS COVERED UNDER THE REVOLVING DOOR PROHIBITION (RDP) POLICY.

ILLINOIS DEPARTMENT OF TRANSPORTATION POSITION DESCRIPTION

DATE: March 28, 2016 **POSITION:** Physical Tests Engineer

APPROVED BY: OFFICE/DIVISION: OHPI/Region 3/District 4

Kensil Garnett

Kensil A. Garnett, Regional Engineer

Project Implementation - Materials

CODE: PW115-23-54-203-30-01 **REPORTS TO:** Materials Engineer

Position Purpose

This position is accountable for the supervision of personnel engaged in inspecting, testing and reporting of materials used in the construction and maintenance of State highways, county highways, township roads, and city streets.

Dimensions

Subordinate Personnel: 3 Direct: 5-10 Indirect Value of Materials Inspected Annually: \$25 to \$50 Million

No. of Projects to which Material assigned: 700-800 Laboratories Supervised: One

Reports & Tests Reviewed: 1,000 to 2,500 Annually 20-25 Gravel Production Sites

Material Producers:

6 Quarries

1 Steel Mfg. Plant 2 Culvert Producers

1 Prestressed Beam Producer 4 Precast Concrete Producers

15-20 Misc. Suppliers

Nature and Scope

This position reports directly to the District Materials Engineer, as do the Geotechnical Engineer, Mixtures Control Engineer, and an Executive Secretary. Reporting directly to this position are the Laboratory Supervisor, Prestressed Concrete Supervisor, and Aggregate/Miscellaneous Products Supervisor.

The incumbent in this position operates in a sensitive economic environment involving significant expenditures of Federal, State, county, and municipal funds where decisions impact material producers and contractors. The results of an effective performance by the incumbent will be the maintenance of an uninterrupted flow of thoroughly inspected and approved materials from the material producer to the contractor. To achieve an effective performance, the incumbent must anticipate and recognize developing situations that demand additional consideration. The incumbent's tactful and timely response will provide the influence required to resolve these situations before major problems evolve. The incumbent must possess expertise in materials technology.

Typical problems which confront the incumbent range from complex technical situations involving evaluation of potential deficiencies in prestressed concrete members, to managerial situations involving deployment of subordinates to maintain a fluid organization. With the implementation of the Construction Quality Management Program (QC/QA), and in particular the Aggregate Gradation Control System, the incumbent is responsible for each source control program by the implementation of the warning and master band control concept, approve their laboratory testing facility and equipment, and monitor their technical personnel training. The incumbent's greatest challenge is ensuring that inspections, samplings, testing, and reporting to appropriate personnel occur within an allotted time frame and conform to established levels of acceptability while maintaining good working relationships for all involved.

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OHPI/Region 3/District 4/Project Implementation - Materials CE V – Physical Tests Engineer Page 2

In performing the functions of this position, the incumbent reviews reports submitted by inspectors; visits the various producer-suppliers for a review of their and the inspector's operations; insures assurance of the appropriate aggregate sources to the specified QA/QC program attested by the review of their daily test plottings; writes materials special provisions; provides technical assistance for writing specifications; investigates material failures occurring on construction projects; assigns personnel to inspection locations; coordinates and supervises testing in the District Laboratory; evaluates and recommends for purchase specialized equipment for use in the Section; advises producer-suppliers on policy procedures and specifications; investigates new sources of materials for highway use; and trains subordinates in methods of testing.

The incumbent accomplishes unit responsibilities through the following subordinate positions:

<u>LABORATORY SUPERVISOR</u> - who, with a staff of one to eight technicians, directly supervises all testing activities in the District Laboratory.

<u>PRESTRESSED CONCRETE SUPERVISOR</u> - who, with a staff of one technician, is responsible for the testing and inspection activities at precast, prestressed plants which supply products for projects in three states.

<u>AGGREGATE/MISCELLANEOUS PRODUCTS SUPERVISOR</u> – who, with a staff of one Aggregate Technician is responsible for providing technical expertise and insuring aggregate testing and reporting is uniform throughout the District and conforms to IDOT specifications and ASTM testing procedures. This position also monitors various miscellaneous products, producers, and supplies.

The incumbent has broad authority to resolve problems that are within the limits of his/her designated responsibilities. Problems that require a joint resolution with other Units within the Bureau or other Bureaus within the District and problems whose decisions are controversial are referred to the District Materials Engineer. The incumbent evaluates subordinate personnel and assists in recommendations for salary adjustments and promotions. The incumbent operates under the Standard Specifications, Departmental Orders, Federal Highway Administration Regulations, American Association of State Highway and Transportation Official Specifications, and the American Society for Testing Material Specifications.

The incumbent is in frequent contact with District Construction personnel to resolve construction project problems; peers from other Districts to discuss situations of mutual concern; counterparts from the Central Bureau of Materials to solicit advice and assistance on special problems and personnel from the Districts Local Roads Section to inspect materials used on Motor Fuel Tax Projects. The incumbent's most significant contacts outside the Department are with material producers, material suppliers, and contractors. In addition, the incumbent has contact with the FHWA, private enterprises, and governmental agencies for relaying and receiving information. Extensive travel is required within the District.

The incumbent's performance is evaluated by the ability to resolve problems before a crisis develops and by the ability to accomplish this within reasonable resource constraints.

Principal Accountabilities

- 1. Ensures materials used on highway construction projects are inspected, tested, and conform to specifications.
- 2. Responsible for the implementation and coordination of the AGCS Aggregate Control Program.
- 3. Establishes objectives that will result in the effective and efficient performance of the Physical Test Unit within the District.
- 4. Maintaining an effective communication network with subordinates, other Department personnel, and outside contacts.
- 5. Provides technical assistance to material producers, manufacturers, and suppliers in solving problems related to quality, and assists in the development and evaluation of proposed new sources of aggregate.
- 6. Assures the District Laboratory operates efficiently, test results are accurate, reports are issued timely, and test equipment is well maintained.
- 7. Trains, assigns, equips, motivates, and evaluate subordinate personnel.
- 8. Performs other duties assigned.
- 9. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.